

BARIUM TITANATE FILM SYNTHESIZING PROCESS

ABSTRACT OF THE DISCLOSURE

A new technique to synthesize barium titanate (BaTiO_3) on homogeneous
5 substrates (titanium) or heterogeneous substrates (silicon wafers, metal, glass, ceramics,
polymers, other metals, etc.) is disclosed to include a first step to deposit a titanium
film on a substrate by sputtering, and a second step to synthesize barium titanate film
with uniformly dispersed spherical particles on the titanium-coated substrate in a
electrolyte containing barium ions by electrochemically anodic oxidation.